

IN THE DRAWINGS

The attached sheets of drawings include changes to Figs. 1, 2, 3 and 4. These sheets, which include Figs. 1, 2, 3 and 4, replace the original sheets including Figs. 1, 2, 3 and 4.

Attachment: Replacement Sheets

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested. Claims 1-13 are pending. Claim 13 has been amended to delete the language “or the like” in order to conform to U.S. standards of foreign practice; see M.P.E.P. § 706.03(d). The title of the invention has been changed as requested by the Official Action (page 2). Figures 1, 2 and 4 of the drawings have been amended as requested to insert the labels for the boxes. A brief telephone interview was conducted between the undersigned and Examiner Williams on August 14, 2007. Examiner Williams clarified that labels were needed for the boxes in Figures 1, 2 and 4.

The Examiner is requested to reconsider and withdraw the rejection of Claim 4 under 35 U.S.C. § 112, second paragraph because Claim 4 recites “a forward power flow,” and the phrase “forward power flow” appears on page 7, line 20 of the specification. Accordingly, it is not seen how the forward power flow lacks efficient antecedent basis in the claim.

In the outstanding Office Action, Claims 1-5, 8, 9, and 13 were rejected under 35 U.S.C. § 102(b) as being anticipated by Takehara et al. Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Takehara et al. in view of Suzui et al. Claims 6 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Takehara et al. in view of Ragsdale. Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Takehara et al. in view of Madenokouji et al. Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Takehara et al. in view of Sarin.

Claim 1 recites, *inter alia*, a load connected to a system power supply, a dummy load connected parallel to said load, a circuit connected to said load and said system power supply for detection of system voltage and current.

Takehara et al. is directed to an apparatus and control method for AC interconnection solar power generation (paragraph [0001]). In particular, Takehara et al. describes an AC

interconnection apparatus capable of preventing any reverse power flow to a commercial power system even when power generated by a solar cell increases in an apparatus which supplies both commercial power and AC power from a solar cell to a load (paragraph [0006]). Takehara et al. also describes providing an AC interconnection apparatus capable of preventing any overpower to a load in an apparatus which supplies both commercial power and AC power from a solar cell to the load (paragraph [0007]). As shown in Figure 2, plug shape connection terminal 11 connects to a commercial power system. A solar cell connection terminal is indicated at 12 (paragraph [0027]). Inverter 14 maintains the input voltage from solar cell 3. Controller 15 of inverter 14 detects the output current and output power of the inverter 14 (paragraph [0030]). Experimental load (60 watt light bulb) 4 directly receives power from commercial power system 2 (paragraph [0034]). Element 16 indicates a current detector. The output of invert 14 goes to AC connection point 17. Element 18 represents a breaker such as a power relay (paragraph [0036]).

Takehara et al. describes preventing reverse power flow as illustrated in Figure 3 by decreasing the output current of the inverter (paragraph [0042]). In addition, as illustrated in Figure 4, in step S11, the load current flowing to the load 4 is detected by the current detector 16. In step S12 it is determined whether the load current exceeds the predetermined value. If yes in step S12, the flow advances to step S13 to open the breaker to execute braking operation (paragraph [0047]). From the above description of Takehara et al., Applicants find that the reference does not anticipate Claims 1-5, 8, 9 and 13 for at least the following reasons:

Claim 1 recites both a load and a dummy load. In Takehara et al. only a single load 4 is described. The Official Action at page 3 asserts that connection terminal 11 meets the claimed load. However, a careful review of Figure 2 of Takehara et al. reveals that element 11 is a terminal or plug to the system AC power supply. In addition Figure 2 illustrates a

single load connection terminal 13. Thus Takehara et al. does not describe both a load and a dummy load. Moreover, load 4 of Takehara et al. is described as being a 60 watt light bulb, not a dummy load.

In addition, Claim 1 recites that the dummy load is connected in parallel to the load. At the outset, Applicants note that because Takehara et al. only describes load 4, the reference does not describe a dummy load connected in parallel to a load. In Figure 1 of Takehara et al., load 4 appears to be in series, not parallel, with connection terminal 11. Moreover, Applicants note that Claim 1 includes subject matter that renders the present invention patentable over Takehara et al. Specifically, in Takehara et al., current detector 16 is provided between load 4 and switch 18. With this arrangement, while the switch 18 is opened, the current detector 16 cannot detect a current flowing into and from commercial power system 2. In contrast, the claimed circuit is connected to both the load and the system power supply. Accordingly, the circuit can monitor the current, i.e., can detect the current flowing into and from the system power supply at all times. Moreover, Applicants note that in Takehara et al., reverse flow is prevented by decreasing the output current of the inverter 14 and overload is prevented by opening the relay 18 to load 4. This is completely different than providing a dummy load to receive excess power in order to prevent overload of load 17 as recited in Claim 4. From all of the above, Applicants request that the rejection of Claim 1, along with similarly rejected Claims 2-5, 8, 9 and 13, be withdrawn.

Turning to Claims 6, 7, and 10-12, Applicants note that these claims depend from Claim 1. Because there is nothing in the Official Action to indicate that the references to Suzui et al., Ragsdale, Madenokouji et al. and Sarin would make up for the deficiencies of Takehara et al., the rejection of Claims 6, 7, and 10-12 should also be withdrawn.

From all of the above, the present application is believed to be in condition for allowance and an early and favorable reconsideration of this application is respectfully requested.

Respectfully submitted,

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